

Product Overview

74AUP1G58: Two-Input, Low Power, Universal Configurable Logic Gate

For complete documentation, see the data sheet.

The 74AUP1G58 is a universal configurable 2-input logic gate that provides a high performance and low power solution ideal for battery-powered portable applications. This product is designed for a wide low voltage operating range (0.8V to 3.6V) and guarantees very low static and dynamic power consumption across the entire voltage range. All inputs are implemented with hysteresis to allow for slower transition input signals and better switching noise immunity. The 74AUP1G58 provides for multiple functions as determined by various configurations of the three inputs. The potential logic functions provided are AND, OR, NOR, NAND, and XNOR, inverter and non-inverter.

Features

- 0.8V to 3.6V V_{CC} Supply Operation
- 3.6V Over-Voltage Tolerant I/Os at V_{CC} from 0.8V to 3.6V
- High Speed t_{PD}
- -3.1ns: Typical at 3.3V
- Power-Off High-Impedance Inputs and Outputs
- Low Static Power Consumption
- - I_{CC} =0.9 μ A Maximum
- Low Dynamic Power Consumption
- - C_{PD} =2.9pF Typical at 3.3V
- Ultra-Small MicroPak™ Packages

For more features, see the data sheet

Applications

- This product is general usage and suitable for many different applications.

Part Electrical Specifications									
Product	Compliance	Status	Type	Channels	V_{CC} Min (V)	V_{CC} Max (V)	t_{pd} Max (ns)	I_O Max (mA)	Package Type
74AUP1G58FHX	Pb-free	Active	SmartGate	1	0.8	3.6	3.1	4	UDFN-6
	Halide free								
74AUP1G58L6X	Pb-free	Active	SmartGate	1	0.8	3.6	3.1	4	SIP-6
	Halide free								

For more information please contact your local sales support at www.onsemi.com.

Created on: 2/18/2019